ABSTRACT

SOLUBILITY DAN DISSOLUTION RATE ENHANCEMENT OF QUERCETIN BY COCRYSTALLIZATION QUERCETINE-SUCCINIC ACID BY SOLVENT EVAPORATION METHOD

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Quercetin is know as a high antioxidant. And quercetin classified as Biopharmaceutical Class II (BCS II) which has poor solubility in aqueous media and high permeability. Cocrystal has been studied by many researcher as a metode to improve solubility and dissolution rate. The aim of this study is to compare the quercetine-succinic acide cocrystal (1:1, 1:2 and 1:3) solubility and dissolution rate with physical mixture (1:1, 1:2 and 1:3) and quercetin it self. The result of solubility and dissolution test were carried out to determine quercetine-succinic acid cocrystal properties. Solubility test dan dissolution test show that there is significant increase in quercetin-succinic acid cocrystal at a ratio of 1:1. And there is no significant increase in quercetin-succinic acid cocrystal at a ratio of 1:2 and 1:3.

Keyword : Quercetine, Succinic acid, Cocrystal, Solubility, Dissolution rate

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